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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/538,455	03/30/2000	Yang Xu	1787-06001	8304

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EXAMINER

CHAMBERS, A MICHAEL

ART UNIT

PAPER NUMBER

3753

DATE MAILED: 02/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/538,455

Applicant(s)

XU ET AL.

Examiner

A. Michael Chambers

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on BPAI Decision and Remand.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17, 20-21 and 23-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to a Decision on Appeal and a Remand to the examiner before the Board of Patent Appeals and Interferences (BAPI) dated September 30, 2003, and July 30, 2004, respectively. As stated in the Decision, the status of the claims is as follows: the rejection of claims 1 through 8, 20, 21, 23, and 24, and 26 through 30 has been reversed and the rejections of claims 9 -17 have been affirmed. Reversed claims 1-8, 20, 21, 23, 24, and 26-30 are considered to be allowed and affirmed claims 9-17 are considered to be cancelled. Claims 18, 19 and 22 have earlier been cancelled. The BAPI declined to decide on the merits of the rejection under 102 (e) of claim 25. In a footnote on page 2 of the Remand the BPAI stated that "Implicit in our decision was that the examiner's Section 102 (e) rejection of claim 25 was vacated." Prosecution has been reopened to properly interpret the means-plus-function limitations of claim 25. An action on the merits of claim 25 is included below.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 25 is rejected under 35 U.S.C. 102(e) as being anticipated by Higdon et al.

Higdon et al show a "...stream switching system...for a gas chromatograph including a selector valve 34 having a plurality of solenoid valves 98, a sheet heater (column 4, lines 57+) and an insulated housing (Figure 3B, for example). The housing has entrance and exit holes are valved

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by the solenoid valve 98. A common stream channel (single inlet/multiple outlet 72) is valved by a particular solenoid 98. Higdon et al disclose that at least part of the tubing, defining the channels, is preheated by the sheet heater (column 4, lines 57+). Higdon et al further state that the sheet heater is included in a cover assembly having a main cover 112 and a temperature control regulator 114 on top for controlling heat pad (e.g., a sheet heater). As stated by Higdon et al, "The heater pad is thereby in thermal contact with the upper manifold 12 to control the temperature of the fluids being transferred through the apparatus of FIG. 1". Applicants' specification includes a broad disclosure of a solenoid actuated stream switching system (page 20). Applicants' specification further includes disclosure only that the "means for heating" is a preheat coil (page 16) or a silicon rubber heater (page 18). Clearly, as discussed in the specification of Higdon et al and as shown in Figure 1, any sample "...after entering the selector valve 34...to any of the plurality of tubes 72 would be heated by the sheet heater" included with the cover assembly. Higdon et al show means 114 (control valve) for selecting which of a plurality of gas samples enter the housing and means (sheet heater) for heating the gas samples after the gas samples have entered the housing of the gas chromatograph. Both the solenoid valves and the sheet heater of Higdon et al (A) perform the function specified in the claims specified in the claims, (B) are not excluded by any explicit definition provided in the specification for an equivalent, and is an equivalent means-plus-function limitation (see MPEP 2183). Similar remarks apply to the means for switching recitation. The prior art solenoid valve and "sheet heater" of Higdon et al perform the heating function specified in claim 25 "...in substantially the manner as the function performed by the corresponding element described in the specification" and clearly meets the means-plus-function limitations of claim 25.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Michael Chambers whose telephone number is 571-272-4908. The examiner can normally be reached on Mon-Thur. 6:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on 571-272-4930. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



A. Michael Chambers
Primary Examiner
Art Unit 3753

amc
January 13, 2005



RICHARD A. BERTSCH
DIRECTOR
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